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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,530	11/29/2000	Yuen Wing Lo	2681/1	1844

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Adams, Schwartz & Evans, P.A.
2180 Two First Union Center
Charlotte, NC 28282

EXAMINER

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,530

Applicant(s)

LO ET AL.

Examiner

Devona E. Faulk

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. **Claim 6** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No.

09/956,333. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 6 discloses a sounding device that has the same functionality, and same elements as the methods disclosed in claims 1. Claim 1 is overall broader than claim 6, and thus it would have been obvious that anything that infringed on the narrower claim 6 would infringe on the broader claim 1.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2644

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Russell (U.S. Patent 5,339,548).

Regarding, claim 1, Russell discloses a drinking vessel (see Figure 6) comprising a bottom and side wall that reads on “a bottom and side wall joined together to form a drinking vessel for holding a liquid”; a detector (34) that senses the level of the liquid in the cup (column 2, lines 46-48), which reads on “a sensor formed with either of said bottom and side walls for detecting liquid disturbance in a vessel”; an alternative liquid level detector (36) (Figure 10) that includes a sound transceiver that samples changes in liquid level, and a signal generator (140) that generates noise and outputs to the transducer (141) (column 4, lines 17-55), which reads on ““a control circuit operatively connected to said sensor and adapted for generating a signal output in response to liquid disturbance in said vessel” and “a loudspeaker “a loudspeaker carried by either of said bottom and side wall, and activated by said signal output for producing outwardly radiating acoustical energy in a frequency range sufficient to be heard by a user”.

Regarding claim 3, Russell teaches of a power source (32) that may be a small battery (32a) (column 3, lines 41-46). Therefore, all elements of claim 3 are comprehended by claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2644

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 2** is rejected under 35 U.S.C. 103 (a) as being unpatentable over Russell (U.S. Patent 5,339,548) in view of Sternberg (U.S. Patent 5,536,196).

Claim 2 claims the sound cup of claim 1, wherein said bottom comprises a removable base defining a compartment for storing said loudspeaker. As stated above apropos of claim 1, Russell meets all elements of that claim. Therefore, Russell meets all elements of claim 2 with the exception of the claimed matter. Sternberg teaches of a drinking vessel with sound effects that has a removable base (Figure 2). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Russell drinking vessel by having a removable base for the benefit of being able to attach the base to other types of drinking vessels.

7. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (U.S. Patent 5,339,548) in view of Corey et al. (U.S. Patent 4,130,215).

Claim 4 claims the sounding cup of claim 1, wherein said bottom comprises a removable base defining a compartment for storing said loudspeaker. As stated above apropos of claim 1, Russell meets all elements of that claim. Therefore, Russell meets all elements of claim 4 with the exception of the claimed matter. Regarding claim 4, Corey teaches that plastic cups are well known in the art. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to make Russell's drinking vessel plastic for the benefit of insulating the beverage.

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8. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (U.S. Patent 5,339,548 in view of Corey et al. (U.S. Patent 4,130,215) in further view of Beranger et al. (U.S. Patent 5,296,802).

Claim 5 claims the sounding cup of claim 4, and comprising a radio magnetic frequency shield embedded in said plastic sidewall to protect said sensor from external interference. As stated above apropos of claim 4, the combination of Russell and Corey meets all elements of that claim. Therefore the combination meets all elements of claim 5 with the exception of the claimed matter. Regarding claim 5, Beranger teaches of a sensor that has a radio or high frequency shield impermeable to radio or high frequency fields, whose frequencies are close to the resonant frequency of the sensor and which is permeable to the magnetic field produced by the current to be measured (column 15, line 65-column 16, line 12) . Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sternberg and Beranger's beverage container so that a radio frequency shield is embedded as claimed for the benefit of protecting the sensor.

9. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lusareta (U.S. Patent 5,990,790) in view of Bontempo et al. (U.S. Patent 5,710,690) in further view of Reed et al. (U. S. Patent 5,460,007).

Regarding **claim 6**, Lusareta discloses a beverage holder with an interchangeable base comprising a beverage holder (25) and a base unit (10) (Figure 1) which reads on "a bottom and side wall joined together to form a drinking vessel for holding a liquid"; a switch (16) that supplies power when a base, in conjunction with a beverage holder is picked up off a table; a speaker (34) and a control circuit (. 13) The switch reads on a "sensor formed with either of said

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bottom and side wall". It does not read on the sensor comprising a clock signal defining a base level capacitance. The control unit reads on "control unit", but not a control unit operatively connected as claimed. Lusareta further teaches of an example of a circuit that can be used in the base, the circuit including an oscillator (Figure 6). However the concept of a clock signal defining a base level capacitance, and a control unit operatively connected as claimed were well known in the art at the time of filing. Bontempo teaches of an oscillator including a clock signal having a frequency defined by a capacitor (See claim 37). It is obvious therefore that the clock signal defines a capacitance. Reed teaches of a control circuit that includes a comparator that receives a capacitance signal, the comparator providing a control signal when said capacitance signal is in a predetermined relationship with a threshold (column 10, lines 17-25). Modifying Lusareta's beverage holder by using Bontempo's oscillator and Reed's control circuit reads on "a sensor comprising a clock signal" as claimed and "a control circuit operatively connected" as claimed, and "the loudspeaker" as claimed. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lusareta beverage holder by using Bontempo's oscillator and Reed's control circuit for the benefit of having a beverage holder with a non-contact sensor that would not be susceptible to problems associated with other types of sensors.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 703-305-4359. The examiner can normally be reached on 8 am - 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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XU MEI
PRIMARY EXAMINER